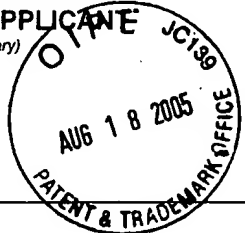


Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	09/753,139
Filing Date	December 29, 2000
First Named Inventor	Quirk, Stephen
Group Art Unit	1652
Examiner Name	Walicka, Malgorzata

Sheet 1 of 2

Attorney Docket No: 1443.108US1

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
dwf	US-5,734,014	03/31/1998	Ishima, Yoshiaki, et al.	03/27/1995

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
dwf		"Wound care is bound for an active future", <u>Clinica</u> , 559, (July 7, 1993), 14-17	
dwf		"Wound Healing - Focus on Growth Factors, Skin Substitutes", <u>MedPro Month</u> , 2(6), (June 1992), 91-94	
dwf		BERG, J. M., et al., "Lessons from zinc-binding peptides", <u>Annu Rev Biophys Biomol Struct.</u> , 26, (1997), 357-71	
dwf		BROWNER, M. F., et al., "1MMQ", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1431761 , (1995)	
dwf		BUTLER, GEORGINA S., "The Specificity of TIMP-2 for Matrix Metalloproteinases Can Be Modified by Single Amino Acid Mutations", <u>Journal of Biological Chemistry</u> , 274 (29), (July 16, 1999), 20391-20396	
dwf		DUIVENVOORDEN, WILHELMINA C., "Use of Tetracycline as an Inhiitor of Matrix Metalloproteinase Activity Secretd by Human Bone-Metastasizing Cancer Cells", <u>Invasion Metastasis</u> , 17, (1997), 312-322	
dwf		FERNANDEZ-CATALAN, C., et al., "1BUV", <u>Protein Databank</u> , (September 7, 1998)	
dwf		GOMIS-RUTH, F. X., "1UEA", <u>Protein Databank</u> , TIMP-1/MMP complex, 1UEA (Gomis-Ruth, Huang, Becker), (June 6, 1997)	
dwf		GOMIS-RUTH, F. X., et al., "TIMP-1", <u>NCBI Protein Database</u> , (1997)	
dwf		GRAMS, F., et al., "1JAO", <u>Protein Databank</u> , (March 11, 1996)	
dwf		GUEx, NICOLAS, "Swiss-MODEL and the Swiss-Pdb Viewer: An environment for comparative protein modeling", <u>Electrophesis</u> , 18, (1997), 2714-2723	
dwf		HAYWARD, MATTHEW M., "Convenient Syntheses of Bifunctional Metal Chelates", <u>Journal of Organic Chemistry</u> , 60(12), (June 16, 1995), 3924-3927	
dwf		LEVY, DANIEL E., "Matrix Metalloproteinase Inhibitors: A Structure-Activity Study", <u>Journal of Medicinal Chemistry</u> , 41(2), (January 15, 1998), 199-223	
dwf		LI, J., et al., "1FBL", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1310872 , (1995)	
dwf		LIBSON, A. M., et al., "1GEN", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1827787 , (1995)	
dwf		MENG, QI, "Residue 2 of TIMP-1 is a major determinant of affinity and specificity for matrix metalloproteinases but effects of substitutions do not correlate with those of the corresponding P1' residue of substrate", <u>Journal of Biological Chemistry</u> , 274 (15), (1999), 10184-10189	
dwf		ODAKE, SHINJIRO, "Inhibition of matrix metalloproteinase by peptidyl hydroxamic acids", <u>Biochemical and Biophysical Research Communications</u> , 199 (3), (1994), 1442-1446	

EXAMINER

dwf/walicka

DATE CONSIDERED

08/19/05

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	09/753,139
Filing Date	December 29, 2000
First Named Inventor	Quirk, Stephen
Group Art Unit	1652
Examiner Name	Walicka, Malgorzata

Sheet 1 of 2

Attorney Docket No: 1443.108US1

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-5,734,014	03/31/1998	Ishima, Yoshiaki, et al.	03/27/1995

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
dm		"Wound care is bound for an active future", <u>Clinica</u> , 559, (July 7, 1993), 14-17	
dm		"Wound Healing - Focus on Growth Factors, Skin Substitutes", <u>MedPro Month.</u> 2(6), (June 1992), 91-94	
dm		BERG, J. M., et al., "Lessons from zinc-binding peptides", <u>Annu Rev Biophys Biomol Struct.</u> , 26, (1997), 357-71	
dm		BROWNER, M. F., et al., "1MMQ", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1431761 , (1995)	
dm		BUTLER, GEORGINA S., "The Specificity of TIMP-2 for Matrix Metalloproteinases Can Be Modified by Single Amino Acid Mutations", <u>Journal of Biological Chemistry</u> , 274 (29), (July 16, 1999), 20391-20396	
dm		DUIVENVOORDEN, WILHELMINA C., "Use of Tetracycline as an Inhibitor of Matrix Metalloproteinase Activity Secreted by Human Bone-Metastasizing Cancer Cells", <u>Invasion Metastasis</u> , 17, (1997), 312-322	
dm		FERNANDEZ-CATALAN, C., et al., "1BUV", <u>Protein Databank</u> , (September 7, 1998)	
dm		GOMIS-RUTH, F. X., "1UEA", <u>Protein Databank</u> , TIMP-1/MMP complex, 1UEA (Gomis-Ruth, Huang, Becker), (June 6, 1997)	
dm		GOMIS-RUTH, F. X., et al., "TIMP-1", <u>NCBI Protein Database</u> , (1997)	
dm		GRAMS, F., et al., "1JAO", <u>Protein Databank</u> , (March 11, 1996)	
dm		GUX, NICOLAS, "Swiss-MODEL and the Swiss-Pdb Viewer: An environment for comparative protein modeling", <u>Electrophoresis</u> , 18, (1997), 2714-2723	
dm		HAYWARD, MATTHEW M., "Convenient Syntheses of Bifunctional Metal Chelates", <u>Journal of Organic Chemistry</u> , 60(12), (June 16, 1995), 3924-3927	
dm		LEVY, DANIEL E., "Matrix Metalloproteinase Inhibitors: A Structure-Activity Study", <u>Journal of Medicinal Chemistry</u> , 41(2), (January 15, 1998), 199-223	
dm		LI, J., et al., "1FBL", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1310872 , (1995)	
dm		LIBSON, A. M., et al., "1GEN", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1827787 , (1995)	
dm		MENG, QI, "Residue 2 of TIMP-1 is a major determinant of affinity and specificity for matrix metalloproteinases but effects of substitutions do not correlate with those of the corresponding P1' residue of substrate", <u>Journal of Biological Chemistry</u> , 274 (15), (1999), 10184-10189	
dm		ODAKE, SHINJIRO, "Inhibition of matrix metalloproteinase by peptidyl hydroxamic acids", <u>Biochemical and Biophysical Research Communications</u> , 199 (3), (1994), 1442-1446	

EXAMINER

dm Walicka

DATE CONSIDERED

08/19/05



\$

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Stephen Quirk et al.

Title: DESIGN AND USE OF ADVANCED ZINC CHELATING PEPTIDES TO REGULATE
MATRIX METALLOPROTEINASES

Docket No.: 1443.108US1

Serial No.: 09/753,139

Filed: December 29, 2000

Due Date: N/A

Examiner: Malgorzata A. Walicka

Group Art Unit: 1652

Hand Delivered to Examiner Malgorzata A. Walicka
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

We are transmitting herewith the following attached items (as indicated with an "X"):

- ☒ Return postcard.
- ☒ Supplemental Information Disclosure Statement (2 pgs.), Form 1449 (2 pgs.), and copies of 23 cited documents.
- ☒ Permission to charge deposit account no. 19-0743 in the amount of \$180.00 to cover the fee for consideration of Information Disclosure Statement under 97(c).

Please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Robin A. Chadwick

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

Customer Number 21186

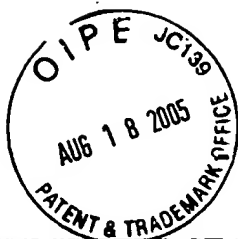
By: _____
Atty: Robin A. Chadwick
Reg. No. 36,477

I hereby certify that the foregoing documents were hand-delivered to Examiner Malgorzata A. Walicka, Art Unit 1652, on this 18 day of August, 2005.

Brian Willyugh
Name

Brian Willyugh
Signature

S/N 09/753,139



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Stephen Quirk et al.	Examiner:	M. A. Walicka
Serial No.:	09/753,139	Group Art Unit:	1652
Filed:	December 29, 2000	Docket:	1443.108US1
Title:	DESIGN AND USE OF ADVANCED ZINC CHELATING PEPTIDES TO REGULATE MATRIX METALLOPROTEINASES		

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Hand Delivered to Examiner M. A. Walicka
Art Unit 1652
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 *et. seq.*, the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Supplemental Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record. Pursuant to the provisions of MPEP 609, Applicants request that a copy of the 1449 form, initialed as being considered by the Examiner, be returned to the Applicants with the next official communication.

Pursuant to 37 C.F.R. §1.97(c)(2), Applicant authorizes the Commissioner to charge the fee of \$180.00 as set forth in 37 C.F.R. §1.17(p) to Deposit Account 19-0743. Please charge any additional fees or credit any overpayment to Deposit Account No. 19-0743.

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Serial No :09/753,139

Filing Date: December 29, 2000

Title: DESIGN AND USE OF ADVANCED ZINC CHELATING PEPTIDES TO REGULATE MATRIX METALLOPROTEINASES

Page 2

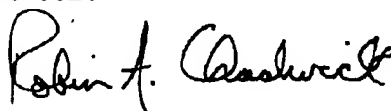
Dkt: 1443.108US1

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

STEPHEN QUIRK ET AL.

By their Representatives,
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. Box 2938
Minneapolis, MN 55402
(516) 795-6820



Date August 17, 2005

By _____
Robin A. Chadwick
Reg. No. 36,477

I hereby certify that the foregoing documents were hand-delivered to Examiner Malgorzata A. Walicka, Art Unit 1652, on this 18 day of August, 2005.

Brian W. Hingham
Name

Brian W. Hingham
Signature

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	09/753,139
Filing Date	December 29, 2000
First Named Inventor	Quirk, Stephen
Group Art Unit	1652
Examiner Name	Walicka, Malgorzata

Sheet 1 of 2

Attorney Docket No: 1443.108US1

US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
JW	US-5,734,014	03/31/1998	Ishima, Yoshiaki, et al.	03/27/1995

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
JW		"Wound care is bound for an active future", <u>Clinica</u> , 559, (July 7, 1993), 14-17	
JW		"Wound Healing - Focus on Growth Factors, Skin Substitutes", <u>MedPro Month</u> , 2(6), (June 1992), 91-94	
JW		BERG, J. M., et al., "Lessons from zinc-binding peptides", <u>Annu Rev Biophys Biomol Struct.</u> , 26, (1997), 357-71	
JW		BROWNER, M. F., et al., "1MMQ", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1431761 , (1995)	
JW		BUTLER, GEORGINA S., "The Specificity of TIMP-2 for Matrix Metalloproteinases Can Be Modified by Single Amino Acid Mutations", <u>Journal of Biological Chemistry</u> , 274 (29), (July 16, 1999), 20391-20396	
JW		DUIVENVOORDEN, WILHELMINA C., "Use of Tetracycline as an Inhiitor of Matrix Metalloproteinase Activity Secreted by Human Bone-Metastasizing Cancer Cells", <u>Invasion Metastasis</u> , 17, (1997), 312-322	
JW		FERNANDEZ-CATALAN, C., et al., "1BUV", <u>Protein Databank</u> , (September 7, 1998)	
JW		GOMIS-RUTH, F. X., "1UEA", <u>Protein Databank</u> , TIMP-1/MMP complex, 1UEA (Gomis-Ruth, Huang, Becker), (June 6, 1997)	
JW		GOMIS-RUTH, F. X., et al., "TIMP-1", <u>NCBI Protein Database</u> , (1997)	
JW		GRAMS, F., et al., "1JAO", <u>Protein Databank</u> , (March 11, 1996)	
JW		GUDEX, NICOLAS, "Swiss-MODEL and the Swiss-Pdb Viewer: An environment for comparative protein modeling", <u>Electrophesis</u> , 18, (1997), 2714-2723	
JW		HAYWARD, MATTHEW M., "Convenient Syntheses of Bifunctional Metal Chelates", <u>Journal of Organic Chemistry</u> , 60(12), (June 16, 1995), 3924-3927	
JW		LEVY, DANIEL E., "Matrix Metalloproteinase Inhibitors: A Structure-Activity Study", <u>Journal of Medicinal Chemistry</u> , 41(2), (January 15, 1998), 199-223	
JW		LI, J., et al., "1FBL", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1310872 , (1995)	
JW		LIBSON, A. M., et al., "1GEN", <u>NCBI Protein Database</u> , http://www.ncbi.nlm.nih.gov/entrez/viewer.fcgi?db=protein&val=1827787 , (1995)	
JW		MENG, QI, "Residue 2 of TIMP-1 is a major determinant of affinity and specificity for matrix metalloproteinases but effects of substitutions do not correlate with those of the corresponding P1' residue of substrate", <u>Journal of Biological Chemistry</u> , 274 (15), (1999), 10184-10189	
JW		ODAKE, SHINJIRO, "Inhibition of matrix metalloproteinase by peptidyl hydroxamic acids", <u>Biochemical and Biophysical Research Communications</u> , 199 (3), (1994), 1442-1446	

EXAMINER

M. Walicka

DATE CONSIDERED

08/19/05

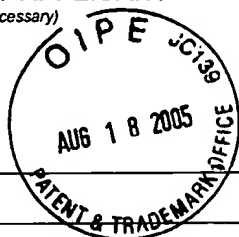
Substitute Disclosure Statement Form (PTO-1449)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional) 2 Applicant is to place a check mark here if English language Translation is attached

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)



Complete if Known

Application Number	09/753,139
Filing Date	December 29, 2000
First Named Inventor	Quirk, Stephen
Group Art Unit	1652
Examiner Name	Walicka, Malgorzata

Sheet 2 of 2

Attorney Docket No: 1443.108US1

OTHER DOCUMENTS -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
dw		OVERALL, CHRISTOPHER M., "Identification of the tissue inhibitor of metalloproteinases-2 (TIMP-2) binding site on the hemopexin carboxyl domain of human gelatinase A by site-directed mutagenesis. The hierarchical role in binding TIMP-2 of the unique cationic clusters of hemopexin m", <u>Journal of Biological Chemistry</u> , 274 (7), (February 12, 1999), 4421-4429	
dw		REINEMER, P., et al., "1JAN", <u>Protein Databank</u> , (March 11, 1996)	
dw		SAYLE, ROGER A., "RASMOL: biomolecular graphics for all", <u>Trends in Biochemical Sciences</u> , 20, (1995), 333-379	
dw		SU, JUI-LAN, "Monoclonal Antibodies against Human Collagenase and Stromelysin", <u>Hybridoma</u> , 14 (4), (1995), 383-390	
dw		TUUTTILA, A., et al., "1BR9", <u>NCBI Protein Database</u> , (1998)	
dw		WOJTOWICZ-PRAGA, S. M., et al., "Matrix metalloproteinase inhibitors", <u>Investigational New Drugs</u> , 15(1), (1997), 61-75	

EXAMINER

Malicka

DATE CONSIDERED

08/19/05

Substitute Disclosure Statement Form (PTO-1448)

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.
¹ Applicant's unique citation designation number (optional) ² Applicant is to place a check mark here if English language Translation is attached